

Serial No.: 10/735,208

PATENT APPLICATION
Docket No.: NC 84,693

REMARKS

Claims 1, 2, 5, 6, 9, and 13-32 are pending in the application. Claims 3, 4, 8, and 10-12 are canceled by this amendment without prejudice. No claims are presently allowed. Claim 14 has been objected to.

Claim 1 has been amended to recite that the oxidizing agent and the moderator form a complex. Support for this amendment is found at paragraph 0020, lines 4-8.

Claim 1 has been amended to cancel the optional limitation that the solvent having a boiling point in excess of about 120°C.

Claims 2, 5, 9, 13, and 14 has been amended for consistency with the amendment to claim 1.

Claim 22 is amended to add the missing period.

No new matter has been added.

Election of Species

Previously, the species of claim 6 was the elected species. In light of the present amendment, it is unclear whether the election of species requirement is still in force. As such, no claims are listed as withdrawn at this time. Applicants can correct the status identifiers of properly withdrawn claims if necessary.

Claim Rejections – 35 U.S.C. § 112

Claims 1, 6, 14-18, 22, 23, 27-30, and 32 have been rejected under 35 U.S.C. § 112, first paragraph as being allegedly nonenabled. The Examiner stated that the specification is enabling for a process of making a conductive coating, but not for any coating.

The coating recited in claim 1 (claims 6, 14-18, 27-30, and 32 dependent thereon) is a mixture of a solvent, a monomer, an oxidizing agent, and a moderator. The claim does not recite any polymer as part of the coating. The claim then recites that this mixture is heated to initiate polymerization of the monomer. The product of the heating step is not recited in the claim.

The specification provides enablement for forming this coating, regardless of any electrical properties of the coating, in paragraph 0047, which shows an example that the coating may be made by spin-coating.

The Examiner cited to paragraphs 0002-0007 and 0047 as mentioning a conductive

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coating. However, these paragraphs only mention the conductivity of polymer films, not of coatings. Paragraph 0005 mentions spin-coating an aqueous solution of Baytron P. Paragraph 0007 mentions a monomer, an oxidizing agent, and a moderator in an alcohol solvent that is spin-coated on a substrate. Paragraph 0047 mentions a monomer solution spin-coated on a substrate. In all three cases, the conductivity of the coating of solution is not mentioned. Only the conductivity of the later-formed polymer film is mentioned. The polymer film is not presently claimed or recited in any claim.

Although the term "coating" is used to refer to a polymer film in paragraph 0002 in relation the prior art, there is no other reference in the application to a "polymer coating." There are no references to conductive coatings of a mixture of a solvent, a monomer, an oxidizing agent, and a moderator. The specification is not limited to conductive coatings of solution.

Though not directly relevant, it is also noted that paragraph 0001 states that the "invention relates to the formation of polymer films, including highly conducting and transparent thin polymer films." Thus, non-conductive films are contemplated within the specification. Whether the film is conductive is at least partially dependent on the monomer selected, not upon the conductivity of the coating of solution.

Claim Rejections – 35 U.S.C. § 102

Claims 1, 22, 24-27, 29, and 30 have been rejected under 35 U.S.C § 102(b) as allegedly anticipated by Angelopoulos et al. (US 6,153,725).

In order to make a *prima facie* case of anticipation, the reference must disclose each limitation of the claim. *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053, 814 F.2d 628, 631 (Fed. Cir. 1987); MPEP 2131. Among other deficiencies, the reference does not disclose the limitation in claim 1 that the oxidizing agent and the moderator form a complex.

The moderator forms a complex with the oxidizing agent, thus lowering the oxidative capacity of the agent (0021, lines 10-12). No such moderator is disclosed in Angelopoulos. The Examiner stated that the solvent, including pyridine or DMF, would act as the moderator. However, the oxidizer in Angelopoulos is ammonium peroxydisulfate (col. 8, lines 12-13), which has no metal atoms. No complex would be formed between this oxidizing agent and pyridine or DMF.

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Also, Angelopoulos does not disclose the limitation that the total concentration of the monomer, the oxidizing agent, and the moderator being at least about 40% by weight. No concentrations are disclosed for the monomer and oxidizing agent, and there is no disclosed moderator within the scope of the claims.

Claims 22, 24-27, 29, and 30 depend from and contain all the limitations of claim 1. The arguments regarding the lack of *prima facie* for claim 1 are applicable to claims 22, 24-27, 29, and 30.

Claim Rejections – 35 U.S.C. § 103

Claims 6, 15-21, and 32 have been rejected under 35 U.S.C § 103(a) as being allegedly unpatentable over Angelopoulos.

As claims 6, 15-21, and 32 are dependent on claim 1, the arguments above regarding claim 1 apply.

Claim 28 has been rejected under 35 U.S.C § 102(a) as allegedly unpatentable over Angelopoulos in view of de Leeuw et al. (*Synth. Met.*, 66, pp. 263-273).

In order to make a *prima facie* case of obviousness, each claim limitation must be disclosed in the references (MPEP 2143.03). As in Angelopoulos, de Leeuw does not disclose the limitation in parent claim 1 that the total concentration of the monomer, the oxidizing agent, and the moderator being at least about 40% by weight. The concentration in de Leeuw is only 26.8% (p. 264, right-hand column, lines 23-26). As this limitation is not disclosed in the references, a *prima facie* case has not been made.

Claim 23 has been rejected under 35 U.S.C § 102(a) as allegedly unpatentable over Angelopoulos in view of Smith et al. (US 5,968,416).

In order to make a *prima facie* case of obviousness, each claim limitation must be disclosed in the references (MPEP 2143.03). As in Angelopoulos, Smith does not disclose the limitation in parent claim 1 that the total concentration of the monomer, the oxidizing agent, and the moderator being at least about 40% by weight. As this limitation is not disclosed in the references, a *prima facie* case has not been made.

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In view of the foregoing, it is submitted that the application is now in condition for allowance.

In the event that a fee is required, please charge the fee to Deposit Account No. 50-0281, and in the event that there is a credit due, please credit Deposit Account No. 50-0281.

Respectfully submitted,



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